(a) contacting said biological sample with one or more nucleic acid probes of HIV-1 selected from the group consisting of:

(1) the probe corresponding to ORF-Q having the following nucleotide sequence:

```
4480        4490        4500        4510        4520        4530
 TGC  CAAGAAGAAA  AGCAAAGATC  ATTAGGGATT  ATGGAAAACA  GATGGCAGGT

      4540        4550        4560        4570        4580
GATGATTGTG  TGGCAAGTAG  ACAGGATGAG  GATTAGAACA  TGGAAAAGTT

      4590        4600        4610        4620        4630
TAGTAAAACA  CCATATGTAT  GTTTCAGGGA  AAGCTAGGGG  ATGGTTTTAT

      4640        4650        4660        4670        4680
AGACATCACT  ATGAAAGCCC  TCATCCAAGA  ATAAGTTCAG  AAGTACACAT

      4690        4700        4710        4720        4730
CCCACTAGGG  GATGCTAGAT  TGGTAATAAC  AACATATTGG  GGTCTGCATA

      4740        4750        4760        4770        4780
CAGGAGAAAG  AGACTGGCAT  CTGGGTCAGG  GAGTCTCCAT  AGAATGGAGG

      4790        4800        4810        4820        4830
AAAAAGAGAT  ATAGCACACA  AGTAGACCCT  GAACTAGCAG  ACCAACTAAT

      4840        4850        4860        4870        4880
TCATCTGTAT  TACTTTGACT  GTTTTTCAGA  CTCTGCTATA  AGAAAGGCCT

      4890        4900        4910        4920        4930
TATTAGGACA  TATAGTTAGC  CCTAGGTGTG  AATATCAAGC  AGGACATAAC

      4940        4950        4960        4970        4980
AAGGTAGGAT  CTCTACAATA  CTTGGCACTA  GCAGCATTAA  TAACACCAAA

      4990        5000        5010        5020        5030
AAAGATAAAG  CCACCTTTGC  CTAGTGTTAC  GAAACTGACA  GAGGATAGAT

      5040        5050        5060        5070        5080
GGAACAAGCC  CCAGAAGACC  AAGGGCCACA  GAGGGAGCCA  CACAATGAAT

GGACAC;
```

(2) the probe corresponding to ORF-R having the following nucleotide sequence:

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```
8250          8260          8270          8280          8290          8300
  GA  CAGGGCTTGG  AAAGGATTTT  GCTATAAGAT  GGGTGGCAAG  TGGTCAAAAA

      8310          8320          8330          8340          8350
GTAGTGTGGT  TGGATGGCCT  ACTGTAAGGG  AAAGAATGAG  ACGAGCTGAG

      8360          8370          8380          8390          8400
CCAGCAGCAG  ATGGGGTGGG  AGCAGCATCT  CGAGACCTGG  AAAAACATGG

      8410          8420          8430          8440          8450
AGCAATCACA  AGTAGCAATA  CAGCAGCTAC  CAATGCTGCT  TGTGCCTGGC

      8460          8470          8480          8490          8500
TAGAAGCACA  AGAGGAGGAG  GAGGTGGGTT  TTCCAGTCAC  ACCTCAGGTA

      8510          8520          8530          8540          8550
CCTTTAAGAC  CAATGACTTA  CAAGGCAGCT  GTAGATCTTA  GCCACTTTTT

      8560          8570          8580          8590          8600
AAAAGAAAAG  GGGGGACTGG  AAGGGCTAAT  TCACTCCCAA  CGAAGACAAG

      8610          8620          8630          8640          8650
ATATCCTTGA  TCTGTGGATC  TACCACACAC  AAGGCTACTT  CCCTGATTGG

      8660          8670          8680          8690          8700
CAGAACTACA  CACCAGGGCC  AGGGGTCAGA  TATCCACTGA  CCTTTGGATG

      8710          8720          8730          8740          8750
GTGCTACAAG  CTAGTACCAG  TTGAGCCAGA  TAAGGTAGAA  GAGGCCAATA

      8760          8770          8780          8790          8800
AAGGAGAGAA  CACCAGCTTG  TTACACCCTG  TGAGCCTGCA  TGGAATGGAT

      8810          8820          8830          8840          8850
GACCCTGAGA  GAGAAGTGTT  AGAGTGGAGG  TTTGACAGCC  GCCTAGCATT

      8860          8870          8890          8900
TCATCACGTG  GCCCGAGAGC  TGCATCCGGA  GTACTTCAAG  AACTGC;
```

(3) the probe corresponding to ORF-1 having the following nucleotide sequence:

```
5030          5040          5050          5060          5070          5080
  AT  GGAACAAGCC  CCAGAAGACC  AAGGGCCACA  GAGGGAGCCA  CACAATGAAT

      5090          5100          5110          5120          5130
GGACACTAGA  GCTTTTAGAG  GAGCTTAAGA  ATGAAGCTGT  TAGACATTTT

      5140          5150          5160          5170          5180
CCTAGGATTT  GGCTCCATGG  CTTAGGGCAA  CATATCTATG  AAACTTATGG
```

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5190 5200 5210 5220 5230
GGATACTTGG GCAGGAGTGG AAGCCATAAT AAGAATTCTG CAACAACTGC

5240 5250 5260 5270 5280
TGTTTATCCA TTTCAGAATT GGGTGTCGAC ATAGCAGAAT AGGCGTTACT

5290 5300 5310
CAACAGAGGA GAGCAAGAAA TGGAGCCAGT AGATCC;

(4) the probe corresponding to ORF-2 having the following nucleotide sequence:

5280 5290 5300 5310 5320
GCGTTACT CAACAGAGGA GAGCAAGAAA TGGAGCCAGT AGATCCTAGA

5330 5340 5350 5360 5370
CTAGAGCCCT GGAAGCATCC AGGAAGTCAG CCTAAAACTG CTTGTACCAC

5380 5390 5400 5410 5420
TTGCTATTGT AAAAAGTGTT GCTTTCATTG CCAAGTTTGT TTCACAACAA

5430 5440 5450 5460 5470
AAGCCTTAGG CATCTCCTAT GGCAGGAAGA AGCGGAGACA GCGACGAAGA

5480 5490 5500 5510
CCTCCTCAAG GCAGTCAGAC TCATCAAGTT TCTCTATCAA AGCAG;

(5) the probe corresponding to ORF-3 having the following nucleotide sequence:

5390 5400 5410 5420 5430
AAAGTGTT GCTTTCATTG CCAAGTTTGT TTCACAACAA AAGCCTTAGG

5440 5450 5460 5470 5480
CATCTCCTAT GGCAGGAAGA AGCGGAGACA GCGACGAAGA CCTCCTCAAG

5490 5500 5510 5520 5530
GCAGTCAGAC TCATCAAGTT TCTCTATCAA AGCAGTAAGT AGTACATGTA

5540 5550 5560 5570 5580
ATGCAACCTA TACAAATAGC AATAGCAGCA TTAGTAGTAG CAATAATAAT

5590 5600 5610
AGCAATAGTT GTGTGGTCCA TAGTAATCAT AGAATA;

(6) the probe corresponding to ORF-4 having the following nucleotide sequence:

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5520 5530 5540 5550 5560 5570
GT AGTACATGTA ATGCAACCTA TACAAATAGC AATAGCAGCA TTAGTAGTAG

5580 5590 5600 5610 5620
CAATAATAAT AGCAATAGTT GTGTGGTCCA TAGTAATCAT AGAATATAGG

5630 5640 5650 5660 5670
AAAATATTAA GACAAAGAAA AATAGACAGG TTAATTGATA GACTAATAGA

5680 5690 5700 5710 5720
AAGAGCAGAA GACAGTGGCA ATGAGAGTGA AGGAGAAATA TCAGCACTTG

5730 5740 5750 5760 5770
TGGAGATGGG GGTGGAAATG GGGCACCATG CTCCTTGGGA TATTGATGAT CTG;

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and

(7) the probe corresponding to ORF-5 having the following nucleotide sequence:

7970 7980 7990 8000 8010
CACTT ATCTGGGACG ATCTGCGGAG CCTTGTGCCT CTTCAGCTAC

8020 8030 8040 8050 8060
CACCGCTTGA GAGACTTACT CTTGATTGTA ACGAGGATTG TGGAACTTCT

8070 8080 8090 8100 8110
GGGACGCAGG GGGTGGGAAG CCCTCAAATA TTGGTGGAAT CTCCTACAGT

8120 8130 8140 8150 8160
ATTGGAGTCA GGAACTAAAG AATAGTGCTG TTAGCTTGCT CAATGCCACA

8170 8180 8190 8200 8210
GCCATAGCAG TAGCTGAGGG GACAGATAGG GTTATAGAAG TAGTACAAGG

8220 8230 8240 8250 8260
AGCTTGTAGA GCTATTCGCC ACATACCTAG AAGAATAAGA CAGGGCTTGG

8270 8280
AAAGGATTTT GCTATAAGA; and

(b) detecting the formation of hybrids between said one or more nucleic acid probes and nucleic acid present in said biological sample.

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12. The method according to claim 11, wherein said probe is labeled with a label selected from the group consisting of a radioactive label, an enzymatic label, and a fluorescent label.

13. An *in vitro* diagnostic method for detecting the presence or absence of nucleic acid of a human immunodeficiency virus type 1 (HIV-1) in a biological sample comprising:

(a) contacting said biological sample with a nucleic acid probe of HIV-1 corresponding to ORF-R having the following nucleotide sequence:

8250	8260	8270	8280	8290	8300
GA	CAGGGCTTGG	AAAGGATTTT	GCTATAAGAT	GGGTGGCAAG	TGGTCAAAAA
8310	8320	8330	8340	8350	
GTAGTGTGGT	TGGATGGCCT	ACTGTAAGGG	AAAGAATGAG	ACGAGCTGAG	
8360	8370	8380	8390	8400	
CCAGCAGCAG	ATGGGGTGGG	AGCAGCATCT	CGAGACCTGG	AAAAACATGG	
8410	8420	8430	8440	8450	
AGCAATCACA	AGTAGCAATA	CAGCAGCTAC	CAATGCTGCT	TGTGCCTGGC	
8460	8470	8480	8490	8500	
TAGAAGCACA	AGAGGAGGAG	GAGGTGGGTT	TTCCAGTCAC	ACCTCAGGTA	
8510	8520	8530	8540	8550	
CCTTTAAGAC	CAATGACTTA	CAAGGCAGCT	GTAGATCTTA	GCCACTTTTT	
8560	8570	8580	8590	8600	
AAAAGAAAAG	GGGGGACTGG	AAGGGCTAAT	TCACTCCCAA	CGAAGACAAG	
8610	8620	8630	8640	8650	
ATATCCTTGA	TCTGTGGATC	TACCACACAC	AAGGCTACTT	CCCTGATTGG	
8660	8670	8680	8690	8700	
CAGAACTACA	CACCAGGGCC	AGGGGTCAGA	TATCCACTGA	CCTTTGGATG	
8710	8720	8730	8740	8750	
GTGCTACAAG	CTAGTACCAG	TTGAGCCAGA	TAAGGTAGAA	GAGGCCAATA	
8760	8770	8780	8790	8800	
AAGGAGAGAA	CACCAGCTTG	TTACACCCTG	TGAGCCTGCA	TGGAATGGAT	

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```
      8810         8820         8830         8840         8850
GACCCTGAGA  GAGAAGTGTT  AGAGTGGAGG  TTTGACAGCC  GCCTAGCATT

      8860         8870         8890         8900
TCATCACGTG  GCCCGAGAGC  TGCATCCGGA  GTACTTCAAG  AACTGC; and
```

(b) detecting the formation of hybrids between said nucleic acid probe and nucleic acid present in said biological sample.

14. The method according to claim ~~13,~~ wherein said probe is labeled with a label selected from the group consisting of a radioactive label, an enzymatic label, and a fluorescent label.

15. An *in vitro* diagnostic kit for detecting the presence or absence of nucleic acid of a human immunodeficiency virus type 1 (HIV-1) in a biological sample comprising:

(a) a composition comprising one or more nucleic acid probes selected from the group consisting of:

(1) the probe corresponding to ORF-Q having the following nucleotide sequence:

```
4480         4490         4500         4510         4520         4530
 TGC  CAAGAAGAAA  AGCAAAGATC  ATTAGGGATT  ATGGAAAACA  GATGGCAGGT

      4540         4550         4560         4570         4580
GATGATTGTG  TGGCAAGTAG  ACAGGATGAG  GATTAGAACA  TGGAAAAGTT

      4590         4600         4610         4620         4630
TAGTAAAACA  CCATATGTAT  GTTTCAGGGA  AAGCTAGGGG  ATGGTTTTAT

      4640         4650         4660         4670         4680
AGACATCACT  ATGAAAGCCC  TCATCCAAGA  ATAAGTTCAG  AAGTACACAT

      4690         4700         4710         4720         4730
CCCACTAGGG  GATGCTAGAT  TGGTAATAAC  AACATATTGG  GGTCTGCATA

      4740         4750         4760         4770         4780
CAGGAGAAAG  AGACTGGCAT  CTGGGTCAGG  GAGTCTCCAT  AGAATGGAGG
```

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4790	4800	4810	4820	4830
AAAAAGAGAT	ATAGCACACA	AGTAGACCCT	GAACTAGCAG	ACCAACTAAT
4840	4850	4860	4870	4880
TCATCTGTAT	TACTTTGACT	GTTTTTCAGA	CTCTGCTATA	AGAAAGGCCT
4890	4900	4910	4920	4930
TATTAGGACA	TATAGTTAGC	CCTAGGTGTG	AATATCAAGC	AGGACATAAC
4940	4950	4960	4970	4980
AAGGTAGGAT	CTCTACAATA	CTTGGCACTA	GCAGCATTAA	TAACACCAAA
4990	5000	5010	5020	5030
AAAGATAAAG	CCACCTTTGC	CTAGTGTTAC	GAAACTGACA	GAGGATAGAT
5040	5050	5060	5070	5080
GGAACAAGCC	CCAGAAGACC	AAGGGCCACA	GAGGGAGCCA	CACAATGAAT

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GGACAC;

(2) the probe corresponding to ORF-R having the following nucleotide sequence:

8250	8260	8270	8280	8290	8300
GA	CAGGGCTTGG	AAAGGATTTT	GCTATAAGAT	GGGTGGCAAG	TGGTCAAAAA
8310	8320	8330	8340	8350	
GTAGTGTGGT	TGGATGGCCT	ACTGTAAGGG	AAAGAATGAG	ACGAGCTGAG	
8360	8370	8380	8390	8400	
CCAGCAGCAG	ATGGGGTGGG	AGCAGCATCT	CGAGACCTGG	AAAAACATGG	
8410	8420	8430	8440	8450	
AGCAATCACA	AGTAGCAATA	CAGCAGCTAC	CAATGCTGCT	TGTGCCTGGC	
8460	8470	8480	8490	8500	
TAGAAGCACA	AGAGGAGGAG	GAGGTGGGTT	TTCCAGTCAC	ACCTCAGGTA	
8510	8520	8530	8540	8550	
CCTTTAAGAC	CAATGACTTA	CAAGGCAGCT	GTAGATCTTA	GCCACTTTTT	
8560	8570	8580	8590	8600	
AAAAGAAAAG	GGGGGACTGG	AAGGGCTAAT	TCACTCCCAA	CGAAGACAAG	
8610	8620	8630	8640	8650	
ATATCCTTGA	TCTGTGGATC	TACCACACAC	AAGGCTACTT	CCCTGATTGG	
8660	8670	8680	8690	8700	
CAGAACTACA	CACCAGGGCC	AGGGGTCAGA	TATCCACTGA	CCTTTGGATG	

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```
      8710         8720         8730         8740         8750
GTGCTACAAG  CTAGTACCAG  TTGAGCCAGA  TAAGGTAGAA  GAGGCCAATA

      8760         8770         8780         8790         8800
AAGGAGAGAA  CACCAGCTTG  TTACACCCTG  TGAGCCTGCA  TGGAATGGAT

      8810         8820         8830         8840         8850
GACCCTGAGA  GAGAAGTGTT  AGAGTGGAGG  TTTGACAGCC  GCCTAGCATT

      8860         8870         8890         8900
TCATCACGTG  GCCCGAGAGC  TGCATCCGGA  GTACTTCAAG  AACTGC;
```

B 6 cont

(3) the probe corresponding to ORF-1 having the following nucleotide sequence:

```
5030        5040        5050        5060        5070        5080
  AT  GGAACAAGCC  CCAGAAGACC  AAGGGCCACA  GAGGGAGCCA  CACAATGAAT

      5090         5100         5110         5120         5130
GGACACTAGA  GCTTTTAGAG  GAGCTTAAGA  ATGAAGCTGT  TAGACATTTT

      5140         5150         5160         5170         5180
CCTAGGATTT  GGCTCCATGG  CTTAGGGCAA  CATATCTATG  AAACTTATGG

      5190         5200         5210         5220         5230
GGATACTTGG  GCAGGAGTGG  AAGCCATAAT  AAGAATTCTG  CAACAACTGC

      5240         5250         5260         5270         5280
TGTTTATCCA  TTTCAGAATT  GGGTGTCGAC  ATAGCAGAAT  AGGCGTTACT

      5290         5300         5310
CAACAGAGGA  GAGCAAGAAA  TGGAGCCAGT  AGATCC;
```

(4) the probe corresponding to ORF-2 having the following nucleotide sequence:

```
    5280         5290         5300         5310         5320
GCGTTACT  CAACAGAGGA  GAGCAAGAAA  TGGAGCCAGT  AGATCCTAGA

      5330         5340         5350         5360         5370
CTAGAGCCCT  GGAAGCATCC  AGGAAGTCAG  CCTAAAACTG  CTTGTACCAC

      5380         5390         5400         5410         5420
TTGCTATTGT  AAAAAGTGTT  GCTTTCATTG  CCAAGTTTGT  TTCACAACAA

      5430         5440         5450         5460         5470
AAGCCTTAGG  CATCTCCTAT  GGCAGGAAGA  AGCGGAGACA  GCGACGAAGA
```

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```
      5480        5490        5500        5510
CCTCCTCAAG  GCAGTCAGAC  TCATCAAGTT  TCTCTATCAA  AGCAG;
```

(5) the probe corresponding to ORF-3 having the following nucleotide sequence:

```
    5390        5400        5410        5420        5430
AAAGTGTT  GCTTTCATTG  CCAAGTTTGT  TTCACAACAA  AAGCCTTAGG

      5440        5450        5460        5470        5480
CATCTCCTAT  GGCAGGAAGA  AGCGGAGACA  GCGACGAAGA  CCTCCTCAAG

      5490        5500        5510        5520        5530
GCAGTCAGAC  TCATCAAGTT  TCTCTATCAA  AGCAGTAAGT  AGTACATGTA

      5540        5550        5560        5570        5580
ATGCAACCTA  TACAAATAGC  AATAGCAGCA  TTAGTAGTAG  CAATAATAAT

      5590        5600        5610
AGCAATAGTT  GTGTGGTCCA  TAGTAATCAT  AGAATA;
```

(6) the probe corresponding to ORF-4 having the following nucleotide sequence:

```
5520        5530        5540        5550        5560        5570
  GT  AGTACATGTA  ATGCAACCTA  TACAAATAGC  AATAGCAGCA  TTAGTAGTAG

      5580        5590        5600        5610        5620
CAATAATAAT  AGCAATAGTT  GTGTGGTCCA  TAGTAATCAT  AGAATATAGG

      5630        5640        5650        5660        5670
AAAATATTAA  GACAAAGAAA  AATAGACAGG  TTAATTGATA  GACTAATAGA

      5680        5690        5700        5710        5720
AAGAGCAGAA  GACAGTGGCA  ATGAGAGTGA  AGGAGAAATA  TCAGCACTTG

      5730        5740        5750        5760        5770
TGGAGATGGG  GGTGGAAATG  GGGCACCATG  CTCCTTGGGA  TATTGATGAT  CTG;
```

and

(7) the probe corresponding to ORF-5 having the following nucleotide sequence:

```
 7970        7980        7990        8000        8010
CACTT  ATCTGGGACG  ATCTGCGGAG  CCTTGTGCCT  CTTCAGCTAC
```

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8020	8030	8040	8050	8060
CACCGCTTGA	GAGACTTACT	CTTGATTGTA	ACGAGGATTG	TGGAACTTCT
8070	8080	8090	8100	8110
GGGACGCAGG	GGGTGGGAAG	CCCTCAAATA	TTGGTGGAAT	CTCCTACAGT
8120	8130	8140	8150	8160
ATTGGAGTCA	GGAACTAAAG	AATAGTGCTG	TTAGCTTGCT	CAATGCCACA
8170	8180	8190	8200	8210
GCCATAGCAG	TAGCTGAGGG	GACAGATAGG	GTTATAGAAG	TAGTACAAGG
8220	8230	8240	8250	8260
AGCTTGTAGA	GCTATTCGCC	ACATACCTAG	AAGAATAAGA	CAGGGCTTGG
8270	8280			
AAAGGATTTT	GCTATAAGA;			

(b) reagents for the detection of hybrids; and

(c) a biological reference sample lacking nucleic acid recognized by said nucleic acid probe composition;

wherein the nucleic acid probe composition, reagents, and biological reference sample are present in an amount sufficient to perform the detection of hybrids formed between said one or more nucleic acid probes and nucleic acid present in said biological sample.

16. The kit according to claim 15, wherein said probe is labeled with a label selected from the group consisting of a radioactive label, an enzymatic label, and a fluorescent label.

17. An *in vitro* diagnostic kit for detecting the presence or absence of nucleic acid of a human immunodeficiency virus type 1 (HIV-1) in a biological sample comprising:

(a) a composition comprising a nucleic acid probe corresponding to ORF-R having the following nucleotide sequence:

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8250 8260 8270 8280 8290 8300
GA CAGGGCTTGG AAAGGATTTT GCTATAAGAT GGGTGGCAAG TGGTCAAAAA

8310 8320 8330 8340 8350
GTAGTGTGGT TGGATGGCCT ACTGTAAGGG AAAGAATGAG ACGAGCTGAG

8360 8370 8380 8390 8400
CCAGCAGCAG ATGGGGTGGG AGCAGCATCT CGAGACCTGG AAAAACATGG

8410 8420 8430 8440 8450
AGCAATCACA AGTAGCAATA CAGCAGCTAC CAATGCTGCT TGTGCCTGGC

8460 8470 8480 8490 8500
TAGAAGCACA AGAGGAGGAG GAGGTGGGTT TTCCAGTCAC ACCTCAGGTA

8510 8520 8530 8540 8550
CCTTTAAGAC CAATGACTTA CAAGGCAGCT GTAGATCTTA GCCACTTTTT

8560 8570 8580 8590 8600
AAAAGAAAAG GGGGGACTGG AAGGGCTAAT TCACTCCCAA CGAAGACAAG

8610 8620 8630 8640 8650
ATATCCTTGA TCTGTGGATC TACCACACAC AAGGCTACTT CCCTGATTGG

8660 8670 8680 8690 8700
CAGAACTACA CACCAGGGCC AGGGGTCAGA TATCCACTGA CCTTTGGATG

8710 8720 8730 8740 8750
GTGCTACAAG CTAGTACCAG TTGAGCCAGA TAAGGTAGAA GAGGCCAATA

8760 8770 8780 8790 8800
AAGGAGAGAA CACCAGCTTG TTACACCCTG TGAGCCTGCA TGGAATGGAT

8810 8820 8830 8840 8850
GACCCTGAGA GAGAAGTGTT AGAGTGGAGG TTTGACAGCC GCCTAGCATT

8860 8870 8890 8900
TCATCACGTG GCCCGAGAGC TGCATCCGGA GTACTTCAAG AACTGC;

(b) reagents for the detection of hybrids; and

(c) a biological reference sample lacking nucleic acid recognized by said nucleic acid probe composition;

wherein the nucleic acid probe composition, reagents, and biological reference sample are present in an amount sufficient

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to perform the detection of hybrids formed between said nucleic acid probe and nucleic acid present in said biological sample.

18. The kit according to claim 17, wherein said probe is labeled with a label selected from the group consisting of a radioactive label, an enzymatic label, and a fluorescent label.

19. An *in vitro* diagnostic method for the detection of the presence or absence of antibodies which bind to antigens of a human immunodeficiency virus type 1 (HIV-1) comprising:

(a) contacting a biological sample with one or more peptides selected from the group consisting of:

(1) the peptide corresponding to ORF-Q having the following amino acid sequence:

Cys-Gln-Glu-Glu-Lys-Gln-Arg-Ser-Leu-Gly-Ile-Met-Glu-Asn-Arg-Trp-Gln-Val-Met-Ile-Val-Trp-Gln-Val-Asp-Arg-Met-Arg-Ile-Arg-Thr-Trp-Lys-Ser-Leu-Val-Lys-His-His-Met-Tyr-Val-Ser-Gly-Lys-Ala-Arg-Gly-Trp-Phe-Tyr-Arg-His-His-Tyr-Glu-Ser-Pro-His-Pro-Arg-Ile-Ser-Ser-Glu-Val-His-Ile-Pro-Leu-Gly-Asp-Ala-Arg-Leu-Val-Ile-Thr-Thr-Val-Trp-Gly-Leu-His-Thr-Gly-Glu-Pro-Asp-Trp-His-Leu-Gly-Gln-Gly-Val-Ser-Ile-Glu-Trp-Arg-Lys-Lys-Arg-Tyr-Ser-Thr-Gln-Val-Asp-Pro-Glu-Leu-Ala-Asp-Gln-Leu-Ile-His-Leu-Tyr-Tyr-Phe-Asp-Cys-Phe-Ser-Asp-Ser-Ala-Ile-Arg-Lys-Ala-Leu-Leu-Gly-His-Ile-Val-Ser-Pro-Arg-Cys-Phe-Tyr-Gln-Ala-Gly-His-Asn-Lys-Val-Gly-Ser-Leu-Gln-Tyr-Leu-Ala-Leu-Ala-Ala-Leu-Ile-Thr-Pro-Lys-Lys-Ile-Lys-Pro-Pro-Leu-Pro-Ser-Val-Thr-Lys-Leu-Thr-Glu-Asp-Arg-Trp-Asn-Lys-Pro-Gln-Lys-Thr-Lys-Gly-His-Arg-Gly-Ser-His-Thr-Met-Asn-Gly-His;

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(2) the peptide corresponding to ORF-R having the following amino acid sequence:

Asp-Arg-Ala-Trp-Lys-Gly-Phe-Cys-Tyr-Lys-Met-Gly-Gly-Lys-Trp-Ser-Lys-Ser-Ser-Val-Val-Gly-Trp-Pro-Thr-Val-Arg-Glu-Arg-Met-Arg-Arg-Ala-Glu-Pro-Ala-Ala-Asp-Gly-Val-Gly-Ala-Ala-Ser-Arg-Asp-Leu-Phe-Lys-His-Gly-Ala-Ile-Thr-Ser-Ser-Asn-Thr-Ala-Ala-Thr-Asn-Ala-Ala-Cys-Ala-Trp-Leu-Phe-Ala-Gln-Phe-Phe-Phe-Phe-Val-Gly-Phe-Pro-Val-Thr-Pro-Gln-Val-Pro-Leu-Arg-Pro-Met-Thr-Tyr-Lys-Ala-Ala-Val-Asp-Leu-Ser-His-Phe-Leu-Lys-Glu-Lys-Gly-Gly-Leu-Glu-Gly-Leu-Ile-His-Ser-Gln-Arg-Arg-Gln-Asp-Ile-Leu-Asp-Leu-Trp-Ile-Tyr-His-Thr-Gln-Gly-Tyr-Phe-Pro-Asp-Trp-Gln-Asn-Tyr-Thr-Pro-Gly-Pro-Gly-Val-Arg-Tyr-Pro-Leu-Thr-Phe-Gly-Trp-Cys-Tyr-Lys-Leu-Val-Pro-Val-Phe-Pro-Asp-Lys-Val-Phe-Phe-Ala-Asn-Lys-Gly-Phe-Asn-Thr-Ser-Leu-Leu-His-Pro-Val-Ser-Leu-His-Gly-Met-Asp-Asp-Pro-Glu-Arg-Glu-Val-Leu-Glu-Trp-Arg-Phe-Asp-Ser-Arg-Leu-Ala-Phe-His-His-Val-Ala-Arg-Glu-Leu-His-Pro-Glu-Tyr-Phe-Lys-Asn-Cys;

(3) the peptide corresponding to ORF-1 having the following amino acid sequence:

Met-Glu-Gln-Ala-Pro-Glu-Asp-Gln-Gly-Pro-Gln-Arg-Asp-Pro-His-Asn-Glu-Trp-Thr-Leu-Gln-Leu-Leu-Glu-Glu-Leu-Lys-Asn-Glu-Ala-Val-Arg-His-Phe-Pro-Arg-Ile-Trp-Leu-His-Gly-Leu-Gly-Gln-His-Ile-Tyr-Glu-Thr-Tyr-Gly-Asp-Thr-Trp-Ala-Gly-Val-Glu-Ala-Ile-Ile-Arg-Ile-Leu-Gln-Gln-Leu-Leu-Phe-Ile-His-Phe-Arg-Ile-Gly-Cys-Arg-His-Ser-Arg-Ile-Gly-Val-Thr-Gln-Gln-Arg-Arg-Ala-Arg-Asn-Gly-Ala-Ser-Arg-Ser;

(4) the peptide corresponding to ORF-2 having the following amino acid sequence:

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Ala-Leu-Leu-Asn-Arg-Gly-Glu-Gln-Glu-Met-Glu-Pro-Val-Asp-Pro-Arg-Leu-Glu-Pro-Trp-Lys-His-Pro-Gly-Ser-Gln-Pro-Lys-Thr-Ala-Cys-Thr-Thr-Cys-Tyr-Cys-Lys-Lys-Cys-Cys-Phe-His-Cys-Gln-Val-Cys-Phe-Thr-Thr-Lys-Ala-Leu-Gly-Ile-Ser-Tyr-Gly-Arg-Lys-Lys-Arg-Arg-Gln-Arg-Arg-Arg-Pro-Pro-Gln-Gly-Ser-Gln-Thr-His-Gln-Val-Ser-Leu-Ser-Lys-Gln;

(5) the peptide corresponding to ORF-3 having the following amino acid sequence:

Lys-Val-Leu-Leu-Ser-Leu-Pro-Ser-Leu-Phe-His-Asn-Lys-Ser-Leu-Arg-His-Leu-Leu-Trp-Gln-Glu-Glu-Ala-Glu-Thr-Ala-Thr-Lys-Thr-Ser-Ser-Arg-Gln-Ser-Asp-Ser-Ser-Ser-Phe-Ser-Ile-Lys-Ala-Val-Ser-Ser-Thr-Cys-Asn-Ala-Thr-Tyr-Thr-Asn-Ser-Asn-Ser-Ser-Ile-Ser-Ser-Ser-Asn-Asn-Asn-Ser-Asn-Ser-Cys-Val-Val-His-Ser-Asn-His-Arg-Ile;

(6) the peptide corresponding to ORF-4 having the following amino acid sequence:

Val-Val-His-Val-Met-Gln-Pro-Ile-Gln-Ile-Ala-Ile-Ala-Ala-Leu-Val-Val-Ala-Ile-Ile-Ile-Ala-Ile-Val-Val-Trp-Ser-Ile-Val-Ile-Ile-Glu-Tyr-Arg-Lys-Ile-Leu-Arg-Gln-Arg-Lys-Ile-Asp-Arg-Leu-Ile-Asp-Arg-Leu-Ile-Glu-Arg-Ala-Glu-Asp-Ser-Gly-Asn-Glu-Ser-Glu-Gly-Glu-Ile-Ser-Ala-Leu-Val-Glu-Met-Gly-Val-Glu-Met-Gly-His-His-Ala-Pro-Trp-Asp-Ile-Asp-Asp-Leu; and

(7) the peptide corresponding to ORF-5 having the following amino acid sequence:

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His-Leu-Ser-Gly-Thr-Ile-Cys-Gly-Ala-Leu-Cys-Leu-Phe-Ser-Tyr-His-Arg-Leu-Arg-Asp-Leu-Leu-Leu-Ile-Val-Thr-Arg-Ile-Val-Glu-Leu-Leu-Gly-Arg-Arg-Gly-Trp-Glu-Ala-Leu-Lys-Tyr-Trp-Trp-Asn-Leu-Leu-Gln-Tyr-Trp-Ser-Gln-Glu-Leu-Lys-Asn-Ser-Ala-Val-Ser-Leu-Leu-Asn-Ala-Thr-Ala-Ile-Ala-Val-Ala-Glu-Gly-Thr-Asp-Arg-Val-Ile-Glu-Val-Val-Gln-Gly-Ala-Cys-Arg-Ala-Ile-Arg-His-Ile-Pro-Arg-Arg-Ile-Arg-Gln-Gly-Leu-Glu-Arg-Ile-Leu-Leu-; and

(b) detecting the formation of antigen-antibody complex between said one or more peptides and antibodies present in said biological sample.

20. The method of claim 19, wherein said peptide is labeled with a label selected from the group consisting of a radioactive label, an enzymatic label, and a fluorescent label.

21. An *in vitro* diagnostic method for the detection of the presence or absence of antibodies which bind to antigens of a human immunodeficiency virus type 1 (HIV-1) comprising:

(a) contacting a biological sample with a peptide corresponding to ORF-R having the following amino acid sequence:

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Asp-Arg-Ala-Trp-Lys-Gly-Phe-Cys-Tyr-Lys-Met-Gly-Gly-Lys-Trp-Ser-Lys-Ser-Ser-Val-Val-Gly-Trp-Pro-Thr-Val-Arg-Glu-Arg-Met-Arg-Arg-Ala-Glu-Pro-Ala-Ala-Asp-Gly-Val-Gly-Ala-Ala-Ser-Arg-Asp-Leu-Phe-Lys-His-Gly-Ala-Ile-Thr-Ser-Ser-Asn-Thr-Ala-Ala-Thr-Asn-Ala-Ala-Cys-Ala-Trp-Leu-Phe-Ala-Gln-Phe-Phe-Phe-Phe-Val-Gly-Phe-Pro-Val-Thr-Pro-Gln-Val-Pro-Leu-Arg-Pro-Met-Thr-Tyr-Lys-Ala-Ala-Val-Asp-Leu-Ser-His-Phe-Leu-Lys-Glu-Lys-Gly-Gly-Leu-Glu-Gly-Leu-Ile-His-Ser-Gln-Arg-Arg-Gln-Asp-Ile-Leu-Asp-Leu-Trp-Ile-Tyr-His-Thr-Gln-Gly-Tyr-Phe-Pro-Asp-Trp-Gln-Asn-Tyr-Thr-Pro-Gly-Pro-Gly-Val-Arg-Tyr-Pro-Leu-Thr-Phe-Gly-Trp-Cys-Tyr-Lys-Leu-Val-Pro-Val-Phe-Pro-Asp-Lys-Val-Phe-Phe-Ala-Asn-Lys-Gly-Phe-Asn-Thr-Ser-Leu-Leu-His-Pro-Val-Ser-Leu-His-Gly-Met-Asp-Asp-Pro-Glu-Arg-Glu-Val-Leu-Glu-Trp-Arg-Phe-Asp-Ser-Arg-Leu-Ala-Phe-His-His-Val-Ala-Arg-Glu-Leu-His-Pro-Glu-Tyr-Phe-Lys-Asn-Cys; and

(b) detecting the formation of antigen-antibody complex between said peptide and antibodies present in said biological sample.

22. The method of claim 21, wherein said peptide is labeled with a label selected from the group consisting of a radioactive label, an enzymatic label, and a fluorescent label.

23. A diagnostic kit for the *in vitro* detection of the presence or absence of antibodies which bind to antigens of a human immunodeficiency virus type 1 (HIV-1) comprising:

(a) a peptide composition comprising one or more peptides selected from the group consisting of:

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(1) the peptide corresponding to ORF-Q having the following amino acid sequence:

Cys-Gln-Glu-Glu-Lys-Gln-Arg-Ser-Leu-Gly-Ile-Met-Glu-Asn-Arg-Trp-Gln-Val-Met-Ile-Val-Trp-Gln-Val-Asp-Arg-Met-Arg-Ile-Arg-Thr-Trp-Lys-Ser-Leu-Val-Lys-His-His-Met-Tyr-Val-Ser-Gly-Lys-Ala-Arg-Gly-Trp-Phe-Tyr-Arg-His-His-Tyr-Glu-Ser-Pro-His-Pro-Arg-Ile-Ser-Ser-Glu-Val-His-Ile-Pro-Leu-Gly-Asp-Ala-Arg-Leu-Val-Ile-Thr-Thr-Val-Trp-Gly-Leu-His-Thr-Gly-Glu-Pro-Asp-Trp-His-Leu-Gly-Gln-Gly-Val-Ser-Ile-Glu-Trp-Arg-Lys-Lys-Arg-Tyr-Ser-Thr-Gln-Val-Asp-Pro-Glu-Leu-Ala-Asp-Gln-Leu-Ile-His-Leu-Tyr-Tyr-Phe-Asp-Cys-Phe-Ser-Asp-Ser-Ala-Ile-Arg-Lys-Ala-Leu-Leu-Gly-His-Ile-Val-Ser-Pro-Arg-Cys-Phe-Tyr-Gln-Ala-Gly-His-Asn-Lys-Val-Gly-Ser-Leu-Gln-Tyr-Leu-Ala-Leu-Ala-Ala-Leu-Ile-Thr-Pro-Lys-Lys-Ile-Lys-Pro-Pro-Leu-Pro-Ser-Val-Thr-Lys-Leu-Thr-Glu-Asp-Arg-Trp-Asn-Lys-Pro-Gln-Lys-Thr-Lys-Gly-His-Arg-Gly-Ser-His-Thr-Met-Asn-Gly-His;

(2) the peptide corresponding to ORF-R having the following amino acid sequence:

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Asp-Arg-Ala-Trp-Lys-Gly-Phe-Cys-Tyr-Lys-Met-Gly-Gly-Lys-Trp-Ser-Lys-Ser-Ser-Val-Val-Gly-Trp-Pro-Thr-Val-Arg-Glu-Arg-Met-Arg-Arg-Ala-Glu-Pro-Ala-Ala-Asp-Gly-Val-Gly-Ala-Ala-Ser-Arg-Asp-Leu-Phe-Lys-His-Gly-Ala-Ile-Thr-Ser-Ser-Asn-Thr-Ala-Ala-Thr-Asn-Ala-Ala-Cys-Ala-Trp-Leu-Phe-Ala-Gln-Phe-Phe-Phe-Phe-Val-Gly-Phe-Pro-Val-Thr-Pro-Gln-Val-Pro-Leu-Arg-Pro-Met-Thr-Tyr-Lys-Ala-Ala-Val-Asp-Leu-Ser-His-Phe-Leu-Lys-Glu-Lys-Gly-Gly-Leu-Glu-Gly-Leu-Ile-His-Ser-Gln-Arg-Arg-Gln-Asp-Ile-Leu-Asp-Leu-Trp-Ile-Tyr-His-Thr-Gln-Gly-Tyr-Phe-Pro-Asp-Trp-Gln-Asn-Tyr-Thr-Pro-Gly-Pro-Gly-Val-Arg-Tyr-Pro-Leu-Thr-Phe-Gly-Trp-Cys-Tyr-Lys-Leu-Val-Pro-Val-Phe-Pro-Asp-Lys-Val-Phe-Phe-Ala-Asn-Lys-Gly-Phe-Asn-Thr-Ser-Leu-Leu-His-Pro-Val-Ser-Leu-His-Gly-Met-Asp-Asp-Pro-Glu-Arg-Glu-Val-Leu-Glu-Trp-Arg-Phe-Asp-Ser-Arg-Leu-Ala-Phe-His-His-Val-Ala-Arg-Glu-Leu-His-Pro-Glu-Tyr-Phe-Lys-Asn-Cys;

(3) the peptide corresponding to ORF-1 having the following amino acid sequence:

Met-Glu-Gln-Ala-Pro-Glu-Asp-Gln-Gly-Pro-Gln-Arg-Asp-Pro-His-Asn-Glu-Trp-Thr-Leu-Gln-Leu-Leu-Glu-Glu-Leu-Lys-Asn-Glu-Ala-Val-Arg-His-Phe-Pro-Arg-Ile-Trp-Leu-His-Gly-Leu-Gly-Gln-His-Ile-Tyr-Glu-Thr-Tyr-Gly-Asp-Thr-Trp-Ala-Gly-Val-Glu-Ala-Ile-Ile-Arg-Ile-Leu-Gln-Gln-Leu-Leu-Phe-Ile-His-Phe-Arg-Ile-Gly-Cys-Arg-His-Ser-Arg-Ile-Gly-Val-Thr-Gln-Gln-Arg-Arg-Ala-Arg-Asn-Gly-Ala-Ser-Arg-Ser;

(4) the peptide corresponding to ORF-2 having the following amino acid sequence:

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Ala-Leu-Leu-Asn-Arg-Gly-Glu-Gln-Glu-Met-Glu-Pro-Val-Asp-Pro-Arg-Leu-Glu-Pro-Trp-Lys-His-Pro-Gly-Ser-Gln-Pro-Lys-Thr-Ala-Cys-Thr-Thr-Cys-Tyr-Cys-Lys-Lys-Cys-Cys-Phe-His-Cys-Gln-Val-Cys-Phe-Thr-Thr-Lys-Ala-Leu-Gly-Ile-Ser-Tyr-Gly-Arg-Lys-Lys-Arg-Arg-Gln-Arg-Arg-Arg-Pro-Pro-Gln-Gly-Ser-Gln-Thr-His-Gln-Val-Ser-Leu-Ser-Lys-Gln;

(5) the peptide corresponding to ORF-3 having the following amino acid sequence:

Lys-Val-Leu-Leu-Ser-Leu-Pro-Ser-Leu-Phe-His-Asn-Lys-Ser-Leu-Arg-His-Leu-Leu-Trp-Gln-Glu-Glu-Ala-Glu-Thr-Ala-Thr-Lys-Thr-Ser-Ser-Arg-Gln-Ser-Asp-Ser-Ser-Ser-Phe-Ser-Ile-Lys-Ala-Val-Ser-Ser-Thr-Cys-Asn-Ala-Thr-Tyr-Thr-Asn-Ser-Asn-Ser-Ser-Ile-Ser-Ser-Ser-Asn-Asn-Asn-Ser-Asn-Ser-Cys-Val-Val-His-Ser-Asn-His-Arg-Ile;

(6) the peptide corresponding to ORF-4 having the following amino acid sequence:

Val-Val-His-Val-Met-Gln-Pro-Ile-Gln-Ile-Ala-Ile-Ala-Ala-Leu-Val-Val-Ala-Ile-Ile-Ile-Ala-Ile-Val-Val-Trp-Ser-Ile-Val-Ile-Ile-Glu-Tyr-Arg-Lys-Ile-Leu-Arg-Gln-Arg-Lys-Ile-Asp-Arg-Leu-Ile-Asp-Arg-Leu-Ile-Glu-Arg-Ala-Glu-Asp-Ser-Gly-Asn-Glu-Ser-Glu-Gly-Glu-Ile-Ser-Ala-Leu-Val-Glu-Met-Gly-Val-Glu-Met-Gly-His-His-Ala-Pro-Trp-Asp-Ile-Asp-Asp-Leu;

(7) the peptide corresponding to ORF-5 having the following amino acid sequence:

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His-Leu-Ser-Gly-Thr-Ile-Cys-Gly-Ala-Leu-Cys-Leu-Phe-Ser-Tyr-His-Arg-Leu-Arg-Asp-Leu-Leu-Leu-Ile-Val-Thr-Arg-Ile-Val-Glu-Leu-Leu-Gly-Arg-Arg-Gly-Trp-Glu-Ala-Leu-Lys-Tyr-Trp-Trp-Asn-Leu-Leu-Gln-Tyr-Trp-Ser-Gln-Glu-Leu-Lys-Asn-Ser-Ala-Val-Ser-Leu-Leu-Asn-Ala-Thr-Ala-Ile-Ala-Val-Ala-Glu-Gly-Thr-Asp-Arg-Val-Ile-Glu-Val-Val-Gln-Gly-Ala-Cys-Arg-Ala-Ile-Arg-His-Ile-Pro-Arg-Arg-Ile-Arg-Gln-Gly-Leu-Glu-Arg-Ile-Leu-Leu-;

(b) reagents for the detection of the formation of antigen-antibody complex; and

(c) a biological reference sample lacking antibodies recognized by said peptide composition,

wherein the peptide composition, reagents, and biological reference sample are present in an amount sufficient to perform the detection of antigen-antibody complex formed between said one or more peptides and antibodies present in said biological sample.

24. The kit of claim 23, wherein said peptide is labeled with a label selected from the group consisting of a radioactive label, an enzymatic label, and a fluorescent label.

25. A diagnostic kit for the *in vitro* detection of the presence or absence of antibodies which bind to antigens of a human immunodeficiency virus type 1 (HIV-1) comprising:

(a) a peptide composition comprising a peptide corresponding to ORF-R having the following amino acid sequence:

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Asp-Arg-Ala-Trp-Lys-Gly-Phe-Cys-Tyr-Lys-Met-Gly-Gly-Lys-Trp-Ser-Lys-Ser-Ser-Val-Val-Gly-Trp-Pro-Thr-Val-Arg-Glu-Arg-Met-Arg-Arg-Ala-Glu-Pro-Ala-Ala-Asp-Gly-Val-Gly-Ala-Ala-Ser-Arg-Asp-Leu-Phe-Lys-His-Gly-Ala-Ile-Thr-Ser-Ser-Asn-Thr-Ala-Ala-Thr-Asn-Ala-Ala-Cys-Ala-Trp-Leu-Phe-Ala-Gln-Phe-Phe-Phe-Phe-Val-Gly-Phe-Pro-Val-Thr-Pro-Gln-Val-Pro-Leu-Arg-Pro-Met-Thr-Tyr-Lys-Ala-Ala-Val-Asp-Leu-Ser-His-Phe-Leu-Lys-Glu-Lys-Gly-Gly-Leu-Glu-Gly-Leu-Ile-His-Ser-Gln-Arg-Arg-Gln-Asp-Ile-Leu-Asp-Leu-Trp-Ile-Tyr-His-Thr-Gln-Gly-Tyr-Phe-Pro-Asp-Trp-Gln-Asn-Tyr-Thr-Pro-Gly-Pro-Gly-Val-Arg-Tyr-Pro-Leu-Thr-Phe-Gly-Trp-Cys-Tyr-Lys-Leu-Val-Pro-Val-Phe-Pro-Asp-Lys-Val-Phe-Phe-Ala-Asn-Lys-Gly-Phe-Asn-Thr-Ser-Leu-Leu-His-Pro-Val-Ser-Leu-His-Gly-Met-Asp-Asp-Pro-Glu-Arg-Glu-Val-Leu-Glu-Trp-Arg-Phe-Asp-Ser-Arg-Leu-Ala-Phe-His-His-Val-Ala-Arg-Glu-Leu-His-Pro-Glu-Tyr-Phe-Lys-Asn-Cys;

(b) reagents for the detection of the formation of antigen-antibody complex; and

(c) a biological reference sample lacking antibodies recognized by said peptide composition,

wherein the peptide composition, reagents, and biological reference sample are present in an amount sufficient to perform the detection of antigen-antibody complex formed between said ~~peptide and antibodies present in said biological sample.~~

26. The kit of claim 25, wherein said peptide is labeled with a label selected from the group consisting of a radioactive label, an enzymatic label, and a fluorescent label.

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27. An *in vitro* diagnostic method for the detection of the presence or absence of antigens which bind to antibodies of a human immunodeficiency virus type 1 (HIV-1) comprising:

(a) contacting a biological sample with one or more antibodies selected from the group consisting of:

(1) an antibody against a peptide corresponding to ORF-Q having the following amino acid sequence:

Cys-Gln-Glu-Glu-Lys-Gln-Arg-Ser-Leu-Gly-Ile-Met-Glu-Asn-Arg-Trp-Gln-Val-Met-Ile-Val-Trp-Gln-Val-Asp-Arg-Met-Arg-Ile-Arg-Thr-Trp-Lys-Ser-Leu-Val-Lys-His-His-Met-Tyr-Val-Ser-Gly-Lys-Ala-Arg-Gly-Trp-Phe-Tyr-Arg-His-His-Tyr-Glu-Ser-Pro-His-Pro-Arg-Ile-Ser-Ser-Glu-Val-His-Ile-Pro-Leu-Gly-Asp-Ala-Arg-Leu-Val-Ile-Thr-Thr-Val-Trp-Gly-Leu-His-Thr-Gly-Glu-Pro-Asp-Trp-His-Leu-Gly-Gln-Gly-Val-Ser-Ile-Glu-Trp-Arg-Lys-Lys-Arg-Tyr-Ser-Thr-Gln-Val-Asp-Pro-Glu-Leu-Ala-Asp-Gln-Leu-Ile-His-Leu-Tyr-Tyr-Phe-Asp-Cys-Phe-Ser-Asp-Ser-Ala-Ile-Arg-Lys-Ala-Leu-Leu-Gly-His-Ile-Val-Ser-Pro-Arg-Cys-Phe-Tyr-Gln-Ala-Gly-His-Asn-Lys-Val-Gly-Ser-Leu-Gln-Tyr-Leu-Ala-Leu-Ala-Ala-Leu-Ile-Thr-Pro-Lys-Lys-Ile-Lys-Pro-Pro-Leu-Pro-Ser-Val-Thr-Lys-Leu-Thr-Glu-Asp-Arg-Trp-Asn-Lys-Pro-Gln-Lys-Thr-Lys-Gly-His-Arg-Gly-Ser-His-Thr-Met-Asn-Gly-His;

(2) an antibody against a peptide corresponding to ORF-R having the following amino acid sequence:

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(3) an antibody against a peptide corresponding to ORF-1 having the following amino acid sequence:

Met-Glu-Gln-Ala-Pro-Glu-Asp-Gln-Gly-Pro-Gln-Arg-Asp-Pro-His-Asn-Glu-Trp-Thr-Leu-Gln-Leu-Leu-Glu-Glu-Leu-Lys-Asn-Glu-Ala-Val-Arg-His-Phe-Pro-Arg-Ile-Trp-Leu-His-Gly-Leu-Gly-Gln-His-Ile-Tyr-Glu-Thr-Tyr-Gly-Asp-Thr-Trp-Ala-Gly-Val-Glu-Ala-Ile-Ile-Arg-Ile-Leu-Gln-Gln-Leu-Leu-Phe-Ile-His-Phe-Arg-Ile-Gly-Cys-Arg-His-Ser-Arg-Ile-Gly-Val-Thr-Gln-Gln-Arg-Arg-Ala-Arg-Asn-Gly-Ala-Ser-Arg-Ser;

(4) an antibody against a peptide corresponding to ORF-2 having the following amino acid sequence:

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Ala-Leu-Leu-Asn-Arg-Gly-Glu-Gln-Glu-Met-Glu-Pro-Val-Asp-Pro-Arg-Leu-Glu-Pro-Trp-Lys-His-Pro-Gly-Ser-Gln-Pro-Lys-Thr-Ala-Cys-Thr-Thr-Cys-Tyr-Cys-Lys-Lys-Cys-Cys-Phe-His-Cys-Gln-Val-Cys-Phe-Thr-Thr-Lys-Ala-Leu-Gly-Ile-Ser-Tyr-Gly-Arg-Lys-Lys-Arg-Arg-Gln-Arg-Arg-Arg-Pro-Pro-Gln-Gly-Ser-Gln-Thr-His-Gln-Val-Ser-Leu-Ser-Lys-Gln;

(5) an antibody against a peptide corresponding to ORF-3 having the following amino acid sequence:

Lys-Val-Leu-Leu-Ser-Leu-Pro-Ser-Leu-Phe-His-Asn-Lys-Ser-Leu-Arg-His-Leu-Leu-Trp-Gln-Glu-Glu-Ala-Glu-Thr-Ala-Thr-Lys-Thr-Ser-Ser-Arg-Gln-Ser-Asp-Ser-Ser-Ser-Phe-Ser-Ile-Lys-Ala-Val-Ser-Ser-Thr-Cys-Asn-Ala-Thr-Tyr-Thr-Asn-Ser-Asn-Ser-Ser-Ile-Ser-Ser-Ser-Asn-Asn-Asn-Ser-Asn-Ser-Cys-Val-Val-His-Ser-Asn-His-Arg-Ile;

(6) an antibody against a peptide corresponding to ORF-4 having the following amino acid sequence:

Val-Val-His-Val-Met-Gln-Pro-Ile-Gln-Ile-Ala-Ile-Ala-Ala-Leu-Val-Val-Ala-Ile-Ile-Ile-Ala-Ile-Val-Val-Trp-Ser-Ile-Val-Ile-Ile-Glu-Tyr-Arg-Lys-Ile-Leu-Arg-Gln-Arg-Lys-Ile-Asp-Arg-Leu-Ile-Asp-Arg-Leu-Ile-Glu-Arg-Ala-Glu-Asp-Ser-Gly-Asn-Glu-Ser-Glu-Gly-Glu-Ile-Ser-Ala-Leu-Val-Glu-Met-Gly-Val-Glu-Met-Gly-His-His-Ala-Pro-Trp-Asp-Ile-Asp-Asp-Leu; and

(7) an antibody against a peptide corresponding to ORF-5 having the following amino acid sequence:

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His-Leu-Ser-Gly-Thr-Ile-Cys-Gly-Ala-Leu-Cys-Leu-Phe-Ser-Tyr-His-Arg-Leu-Arg-Asp-Leu-Leu-Leu-Ile-Val-Thr-Arg-Ile-Val-Glu-Leu-Leu-Gly-Arg-Arg-Gly-Trp-Glu-Ala-Leu-Lys-Tyr-Trp-Trp-Asn-Leu-Leu-Gln-Tyr-Trp-Ser-Gln-Glu-Leu-Lys-Asn-Ser-Ala-Val-Ser-Leu-Leu-Asn-Ala-Thr-Ala-Ile-Ala-Val-Ala-Glu-Gly-Thr-Asp-Arg-Val-Ile-Glu-Val-Val-Gln-Gly-Ala-Cys-Arg-Ala-Ile-Arg-His-Ile-Pro-Arg-Arg-Ile-Arg-Gln-Gly-Leu-Glu-Arg-Ile-Leu-Leu-; and

(b) detecting the formation of antigen-antibody complex between said one or more antibodies and antigens present in said ~~biological sample.~~

28. The method of claim 27, wherein said antibody is labeled with a label selected from the group consisting of a radioactive label, an enzymatic label, and a fluorescent label.

29. An *in vitro* diagnostic method for the detection of the presence or absence of antigens which bind to antibodies of a human immunodeficiency virus type 1 (HIV-1) comprising:

(a) contacting a biological sample with an antibody against a peptide corresponding to ORF-R having the following amino acid sequence:

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Asp-Arg-Ala-Trp-Lys-Gly-Phe-Cys-Tyr-Lys-Met-Gly-Gly-Lys-Trp-Ser-Lys-Ser-Ser-Val-Val-Gly-Trp-Pro-Thr-Val-Arg-Glu-Arg-Met-Arg-Arg-Ala-Glu-Pro-Ala-Ala-Asp-Gly-Val-Gly-Ala-Ala-Ser-Arg-Asp-Leu-Phe-Lys-His-Gly-Ala-Ile-Thr-Ser-Ser-Asn-Thr-Ala-Ala-Thr-Asn-Ala-Ala-Cys-Ala-Trp-Leu-Phe-Ala-Gln-Phe-Phe-Phe-Phe-Val-Gly-Phe-Pro-Val-Thr-Pro-Gln-Val-Pro-Leu-Arg-Pro-Met-Thr-Tyr-Lys-Ala-Ala-Val-Asp-Leu-Ser-His-Phe-Leu-Lys-Glu-Lys-Gly-Gly-Leu-Glu-Gly-Leu-Ile-His-Ser-Gln-Arg-Arg-Gln-Asp-Ile-Leu-Asp-Leu-Trp-Ile-Tyr-His-Thr-Gln-Gly-Tyr-Phe-Pro-Asp-Trp-Gln-Asn-Tyr-Thr-Pro-Gly-Pro-Gly-Val-Arg-Tyr-Pro-Leu-Thr-Phe-Gly-Trp-Cys-Tyr-Lys-Leu-Val-Pro-Val-Phe-Pro-Asp-Lys-Val-Phe-Phe-Ala-Asn-Lys-Gly-Phe-Asn-Thr-Ser-Leu-Leu-His-Pro-Val-Ser-Leu-His-Gly-Met-Asp-Asp-Pro-Glu-Arg-Glu-Val-Leu-Glu-Trp-Arg-Phe-Asp-Ser-Arg-Leu-Ala-Phe-His-His-Val-Ala-Arg-Glu-Leu-His-Pro-Glu-Tyr-Phe-Lys-Asn-Cys; and

(b) detecting the formation of antigen-antibody complex between said antibody and antigens present in said biological sample.

30. The method of claim 29, wherein said antibody is labeled with a label selected from the group consisting of a radioactive label, an enzymatic label, and a fluorescent label.

31. A diagnostic kit for the *in vitro* detection of the presence or absence of antigens which bind to antibodies of a human immunodeficiency virus type 1 (HIV-1) comprising:

(a) an antibody composition comprising one or more antibodies selected from the group consisting of:

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C4 cont

B4 cont

(1) an antibody against a peptide corresponding to ORF-Q having the following amino acid sequence:

Cys-Gln-Glu-Glu-Lys-Gln-Arg-Ser-Leu-Gly-Ile-Met-Glu-Asn-Arg-Trp-Gln-Val-Met-Ile-Val-Trp-Gln-Val-Asp-Arg-Met-Arg-Ile-Arg-Thr-Trp-Lys-Ser-Leu-Val-Lys-His-His-Met-Tyr-Val-Ser-Gly-Lys-Ala-Arg-Gly-Trp-Phe-Tyr-Arg-His-His-Tyr-Glu-Ser-Pro-His-Pro-Arg-Ile-Ser-Ser-Glu-Val-His-Ile-Pro-Leu-Gly-Asp-Ala-Arg-Leu-Val-Ile-Thr-Thr-Val-Trp-Gly-Leu-His-Thr-Gly-Glu-Pro-Asp-Trp-His-Leu-Gly-Gln-Gly-Val-Ser-Ile-Glu-Trp-Arg-Lys-Lys-Arg-Tyr-Ser-Thr-Gln-Val-Asp-Pro-Glu-Leu-Ala-Asp-Gln-Leu-Ile-His-Leu-Tyr-Tyr-Phe-Asp-Cys-Phe-Ser-Asp-Ser-Ala-Ile-Arg-Lys-Ala-Leu-Leu-Gly-His-Ile-Val-Ser-Pro-Arg-Cys-Phe-Tyr-Gln-Ala-Gly-His-Asn-Lys-Val-Gly-Ser-Leu-Gln-Tyr-Leu-Ala-Leu-Ala-Ala-Leu-Ile-Thr-Pro-Lys-Lys-Ile-Lys-Pro-Pro-Leu-Pro-Ser-Val-Thr-Lys-Leu-Thr-Glu-Asp-Arg-Trp-Asn-Lys-Pro-Gln-Lys-Thr-Lys-Gly-His-Arg-Gly-Ser-His-Thr-Met-Asn-Gly-His;

(2) an antibody against a peptide corresponding to ORF-R having the following amino acid sequence:

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C 6 cont

B 6 cont

Asp-Arg-Ala-Trp-Lys-Gly-Phe-Cys-Tyr-Lys-Met-Gly-Gly-Lys-Trp-Ser-Lys-Ser-Ser-Val-Val-Gly-Trp-Pro-Thr-Val-Arg-Glu-Arg-Met-Arg-Arg-Ala-Glu-Pro-Ala-Ala-Asp-Gly-Val-Gly-Ala-Ala-Ser-Arg-Asp-Leu-Phe-Lys-His-Gly-Ala-Ile-Thr-Ser-Ser-Asn-Thr-Ala-Ala-Thr-Asn-Ala-Ala-Cys-Ala-Trp-Leu-Phe-Ala-Gln-Phe-Phe-Phe-Phe-Val-Gly-Phe-Pro-Val-Thr-Pro-Gln-Val-Pro-Leu-Arg-Pro-Met-Thr-Tyr-Lys-Ala-Ala-Val-Asp-Leu-Ser-His-Phe-Leu-Lys-Glu-Lys-Gly-Gly-Leu-Glu-Gly-Leu-Ile-His-Ser-Gln-Arg-Arg-Gln-Asp-Ile-Leu-Asp-Leu-Trp-Ile-Tyr-His-Thr-Gln-Gly-Tyr-Phe-Pro-Asp-Trp-Gln-Asn-Tyr-Thr-Pro-Gly-Pro-Gly-Val-Arg-Tyr-Pro-Leu-Thr-Phe-Gly-Trp-Cys-Tyr-Lys-Leu-Val-Pro-Val-Phe-Pro-Asp-Lys-Val-Phe-Phe-Ala-Asn-Lys-Gly-Phe-Asn-Thr-Ser-Leu-Leu-His-Pro-Val-Ser-Leu-His-Gly-Met-Asp-Asp-Pro-Glu-Arg-Glu-Val-Leu-Glu-Trp-Arg-Phe-Asp-Ser-Arg-Leu-Ala-Phe-His-His-Val-Ala-Arg-Glu-Leu-His-Pro-Glu-Tyr-Phe-Lys-Asn-Cys;

(3) an antibody against a peptide corresponding to ORF-1 having the following amino acid sequence:

Met-Glu-Gln-Ala-Pro-Glu-Asp-Gln-Gly-Pro-Gln-Arg-Asp-Pro-His-Asn-Glu-Trp-Thr-Leu-Gln-Leu-Leu-Glu-Glu-Leu-Lys-Asn-Glu-Ala-Val-Arg-His-Phe-Pro-Arg-Ile-Trp-Leu-His-Gly-Leu-Gly-Gln-His-Ile-Tyr-Glu-Thr-Tyr-Gly-Asp-Thr-Trp-Ala-Gly-Val-Glu-Ala-Ile-Ile-Arg-Ile-Leu-Gln-Gln-Leu-Leu-Phe-Ile-His-Phe-Arg-Ile-Gly-Cys-Arg-His-Ser-Arg-Ile-Gly-Val-Thr-Gln-Gln-Arg-Arg-Ala-Arg-Asn-Gly-Ala-Ser-Arg-Ser;

(4) an antibody against a peptide corresponding to ORF-2 having the following amino acid sequence:

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Ala-Leu-Leu-Asn-Arg-Gly-Glu-Gln-Glu-Met-Glu-Pro-Val-Asp-Pro-Arg-Leu-Glu-Pro-Trp-Lys-His-Pro-Gly-Ser-Gln-Pro-Lys-Thr-Ala-Cys-Thr-Thr-Cys-Tyr-Cys-Lys-Lys-Cys-Cys-Phe-His-Cys-Gln-Val-Cys-Phe-Thr-Thr-Lys-Ala-Leu-Gly-Ile-Ser-Tyr-Gly-Arg-Lys-Lys-Arg-Arg-Gln-Arg-Arg-Arg-Pro-Pro-Gln-Gly-Ser-Gln-Thr-His-Gln-Val-Ser-Leu-Ser-Lys-Gln;

(5) an antibody against a peptide corresponding to ORF-3 having the following amino acid sequence:

Lys-Val-Leu-Leu-Ser-Leu-Pro-Ser-Leu-Phe-His-Asn-Lys-Ser-Leu-Arg-His-Leu-Leu-Trp-Gln-Glu-Glu-Ala-Glu-Thr-Ala-Thr-Lys-Thr-Ser-Ser-Arg-Gln-Ser-Asp-Ser-Ser-Ser-Phe-Ser-Ile-Lys-Ala-Val-Ser-Ser-Thr-Cys-Asn-Ala-Thr-Tyr-Thr-Asn-Ser-Asn-Ser-Ser-Ile-Ser-Ser-Ser-Asn-Asn-Asn-Ser-Asn-Ser-Cys-Val-Val-His-Ser-Asn-His-Arg-Ile;

(6) an antibody against a peptide corresponding to ORF-4 having the following amino acid sequence:

Val-Val-His-Val-Met-Gln-Pro-Ile-Gln-Ile-Ala-Ile-Ala-Ala-Leu-Val-Val-Ala-Ile-Ile-Ile-Ala-Ile-Val-Val-Trp-Ser-Ile-Val-Ile-Ile-Glu-Tyr-Arg-Lys-Ile-Leu-Arg-Gln-Arg-Lys-Ile-Asp-Arg-Leu-Ile-Asp-Arg-Leu-Ile-Glu-Arg-Ala-Glu-Asp-Ser-Gly-Asn-Glu-Ser-Glu-Gly-Glu-Ile-Ser-Ala-Leu-Val-Glu-Met-Gly-Val-Glu-Met-Gly-His-His-Ala-Pro-Trp-Asp-Ile-Asp-Asp-Leu; and

(7) an antibody against a peptide corresponding to ORF-5 having the following amino acid sequence:

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His-Leu-Ser-Gly-Thr-Ile-Cys-Gly-Ala-Leu-Cys-Leu-Phe-Ser-Tyr-His-Arg-Leu-Arg-Asp-Leu-Leu-Leu-Ile-Val-Thr-Arg-Ile-Val-Glu-Leu-Leu-Gly-Arg-Arg-Gly-Trp-Glu-Ala-Leu-Lys-Tyr-Trp-Trp-Asn-Leu-Leu-Gln-Tyr-Trp-Ser-Gln-Glu-Leu-Lys-Asn-Ser-Ala-Val-Ser-Leu-Leu-Asn-Ala-Thr-Ala-Ile-Ala-Val-Ala-Glu-Gly-Thr-Asp-Arg-Val-Ile-Glu-Val-Val-Gln-Gly-Ala-Cys-Arg-Ala-Ile-Arg-His-Ile-Pro-Arg-Arg-Ile-Arg-Gln-Gly-Leu-Glu-Arg-Ile-Leu-Leu-;

(b) reagents for the detection of the formation of antigen-antibody complex; and

(c) a biological reference sample lacking antigens recognized by said antibody composition,

wherein the antibody composition, reagents, and biological reference sample are present in an amount sufficient to perform the detection of antigen-antibody complex formed between said one or more antibodies and antigens present in said biological sample.

32. The kit of claim 31, wherein said antibody is labeled with a label selected from the group consisting of a radioactive label, an enzymatic label, and a fluorescent label.

33. A diagnostic kit for the *in vitro* detection of the presence or absence of antigens which bind to antibodies of a human immunodeficiency virus type 1 (HIV-1) comprising:

(a) an antibody composition comprising an antibody against a peptide corresponding to ORF-R having the following amino acid sequence:

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Asp-Arg-Ala-Trp-Lys-Gly-Phe-Cys-Tyr-Lys-Met-Gly-Gly-Lys-Trp-Ser-Lys-Ser-Ser-Val-Val-Gly-Trp-Pro-Thr-Val-Arg-Glu-Arg-Met-Arg-Arg-Ala-Glu-Pro-Ala-Ala-Asp-Gly-Val-Gly-Ala-Ala-Ser-Arg-Asp-Leu-Phe-Lys-His-Gly-Ala-Ile-Thr-Ser-Ser-Asn-Thr-Ala-Ala-Thr-Asn-Ala-Ala-Cys-Ala-Trp-Leu-Phe-Ala-Gln-Phe-Phe-Phe-Phe-Val-Gly-Phe-Pro-Val-Thr-Pro-Gln-Val-Pro-Leu-Arg-Pro-Met-Thr-Tyr-Lys-Ala-Ala-Val-Asp-Leu-Ser-His-Phe-Leu-Lys-Glu-Lys-Gly-Gly-Leu-Glu-Gly-Leu-Ile-His-Ser-Gln-Arg-Arg-Gln-Asp-Ile-Leu-Asp-Leu-Trp-Ile-Tyr-His-Thr-Gln-Gly-Tyr-Phe-Pro-Asp-Trp-Gln-Asn-Tyr-Thr-Pro-Gly-Pro-Gly-Val-Arg-Tyr-Pro-Leu-Thr-Phe-Gly-Trp-Cys-Tyr-Lys-Leu-Val-Pro-Val-Phe-Pro-Asp-Lys-Val-Phe-Phe-Ala-Asn-Lys-Gly-Phe-Asn-Thr-Ser-Leu-Leu-His-Pro-Val-Ser-Leu-His-Gly-Met-Asp-Asp-Pro-Glu-Arg-Glu-Val-Leu-Glu-Trp-Arg-Phe-Asp-Ser-Arg-Leu-Ala-Phe-His-His-Val-Ala-Arg-Glu-Leu-His-Pro-Glu-Tyr-Phe-Lys-Asn-Cys;

(b) reagents for the detection of the formation of antigen-antibody complex; and

(c) a biological reference sample lacking antigens recognized by said antibody composition,

wherein the antibody composition, reagents, and biological reference sample are present in an amount sufficient to perform the detection of antigen-antibody complex formed between said antibody and antigens present in said biological sample.

34. The kit of claim 33, wherein said antibody is labeled with a label selected from the group consisting of a radioactive label, an enzymatic label, and a fluorescent label.--

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